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NEW UTILITY PATENT APPLICATION TRANSMITTAL

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(Only for new nonprovisional applications under 37 CFR 1.53(b))

Total Pages this Submission:3

TO THE ASSISTANT COMMISSIONER FOR PATENTS

Box Patent Application
Washington, D.C. 20231

Transmitted herewith for filing under 35 U.S.C. 111(a) and 37 C.F.R. 1.53(b) is a new utility patent application for an invention entitled:
SYSTEM AND METHOD FOR MEASURING AND MANAGING PERFORMANCE IN AN INFORMATION
TECHNOLOGY ORGANIZATION

and invented by:

SUZANNE M. JORDAN, PATRICK W. McMAHON, DAVID B. McNEILL, NORA M. PANLILIO-YAP

If a CONTINUATION APPLICATION, check the appropriate box and supply the requisite information:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application
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Application Elements

- 01. ☒ Filing fee as calculated and transmitted as described below
- 02. ☒ Specification having 56 pages and including the following:
 - a. ☒ Descriptive Title of the Invention
 - b. ☐ Cross References to Related Applications *(if applicable)*
 - c. ☐ Statement Regarding Federally-sponsored Research/Development *(if applicable)*
 - d. ☐ Reference to Microfiche Appendix *(if applicable)*
 - e. ☒ Background of the Invention
 - f. ☒ Brief Summary of the Invention
 - g. ☒ Brief Description of the Drawings *(if drawings filed)*
 - h. ☒ Detailed Description
 - i. ☒ Claim(s) as Classified Below
 - j. ☒ Abstract of the Disclosure
- 03. ☒ Drawing(s) when necessary as prescribed by 35 USC 113)
 - a. ☐ Formal
 - b. ☒ Informal

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04. ☒ Oath or Declaration

05. ☐ Incorporation By Reference (usable if box 4b is checked)

06. ☐ Computer Program in Microfiche (Appendix)

08. ☐ Assignment Papers (cover sheet & document(s))

09. ☐ 37 CFR 3.73(B) Statement (when there is an assignee)

10. ☐ English Translation Document (if applicable)

11. ☒ Information Disclosure Statement/PTO-1449 ☒ Copies of IDS citation

12. ☐ Preliminary Amendment

13. ☒ Acknowledgment postcard

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: S. M. JORDAN, ET AL
Serial No.: N/A Group No.: N/A
Filed: HEREWITH Examiner: N/A
For: SYSTEM AND METHOD FOR MEASURING AND MANAGING PERFORMANCE IN AN
INFORMATION TECHNOLOGY ORGANIZATION

Assistant Commissioner For Patents
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New Utility Patent Application Transmittal
Specification: 56 pages (including claims)
Declaration and Power of Attorney (not signed)
Drawings (8 sheets)
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Table 1. Demographic characteristics of the study population	
Age (years)	
18-24	10.0
25-34	15.0
35-44	20.0
45-54	25.0
55-64	30.0
65-74	35.0
75-84	40.0
85-94	45.0
95-104	50.0
105-114	55.0
115-124	60.0
125-134	65.0
135-144	70.0
145-154	75.0
155-164	80.0
165-174	85.0
175-184	90.0
185-194	95.0
195-204	100.0
205-214	105.0
215-224	110.0
225-234	115.0
235-244	120.0
245-254	125.0
255-264	130.0
265-274	135.0
275-284	140.0
285-294	145.0
295-304	150.0
305-314	155.0
315-324	160.0
325-334	165.0
335-344	170.0
345-354	175.0
355-364	180.0
365-374	185.0
375-384	190.0
385-394	195.0
395-404	200.0
405-414	205.0
415-424	210.0
425-434	215.0
435-444	220.0
445-454	225.0
455-464	230.0
465-474	235.0
475-484	240.0
485-494	245.0
495-504	250.0
505-514	255.0
515-524	260.0
525-534	265.0
535-544	270.0
545-554	275.0
555-564	280.0
565-574	285.0
575-584	290.0
585-594	295.0
595-604	300.0
605-614	305.0
615-624	310.0
625-634	315.0
635-644	320.0
645-654	325.0
655-664	330.0
665-674	335.0
675-684	340.0
685-694	345.0
695-704	350.0
705-714	355.0
715-724	360.0
725-734	365.0
735-744	370.0
745-754	375.0
755-764	380.0
765-774	385.0
775-784	390.0
785-794	395.0
795-804	400.0
805-814	405.0
815-824	410.0
825-834	415.0
835-844	420.0
845-854	425.0
855-864	430.0
865-874	435.0
875-884	440.0
885-894	445.0
895-904	450.0
905-914	455.0
915-924	460.0
925-934	465.0
935-944	470.0
945-954	475.0
955-964	480.0
965-974	485.0
975-984	490.0
985-994	495.0
995-1004	500.0
1005-1014	505.0
1015-1024	510.0
1025-1034	515.0
1035-1044	520.0
1045-1054	525.0
1055-1064	530.0
1065-1074	535.0
1075-1084	540.0
1085-1094	545.0
1095-1104	550.0
1105-1114	555.0
1115-1124	560.0
1125-1134	565.0
1135-1144	570.0
1145-1154	575.0
1155-1164	580.0
1165-1174	585.0
1175-1184	590.0
1185-1194	595.0
1195-1204	600.0
1205-1214	605.0
1215-1224	610.0
1225-1234	615.0
1235-1244	620.0
1245-1254	625.0
1255-1264	630.0
1265-1274	635.0
1275-1284	640.0
1285-1294	645.0
1295-1304	650.0

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CERTIFICATE OF MAILING UNDER 37 CFR 1.10

Judith A. Beckstrand 3 AUG 2000
Signature Date

SYSTEM AND METHOD FOR MEASURING AND MANAGING PERFORMANCE IN AN INFORMATION TECHNOLOGY ORGNIZATION

Background of the Invention

5 Technical Field of the Invention

This invention pertains performance management. More particularly, it relates to measuring and managing the performance of an information technology (IT) organization.

Background Art

10 Developing a system that measures the performance of an IT organization is critical to managing the IT organization and continually improving the processes that it employs over time. However, no regular, canonical method for developing a system that measures the performance of an IT organization
15 is evident in the industry. The lack of such a method creates great difficulty in understanding the performance of the IT organization, and this is a critical aspect to successful management and improvement of the IT organization over time. This problem has existed since the formation of
20 IT organizations. Consequently, there is a need in the art

for a repeatable work product-based method for defining and implementing a measurement program for an IT organization.

There is a need in the art for a system and method for providing measurement gap analysis describing the relationship between the measurement system and the underlying organization and processes. Without appropriate organizational and process support, it is difficult for any measurement system to achieve maximum potential usefulness. Measurement systems that are supported by the appropriate organizational structure and are fully integrated with the organizations process have a much higher probability of being effective.

It is an object of the invention to provide a system and method for systematically defining and implementing a measurement program.

It is a further object of the invention to provide a system and method for implementing a measurement program that is supported by an appropriate organizational structure and that is fully integrated with the organization's processes.

It is a further object of the invention to provide a

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system and method for identifying and defining measurements
necessary to support the management of an IT organization.

5 It is a further object of the invention to provide a
system and method for linking defined measurements to
organization goals and objectives.

It is a further object of the invention to provide a
system and method of integrating measurement ownership into
an organizational model.

10 It is a further object of the invention to provide a
system and method for integrating measurement data
collection into an IT process model.

15 It is a further object of the invention to provide a
system and method for developing a technical environment for
supporting measurement data collection, analysis and
reporting.

It is a further object of the invention to provide a
system and method for developing the technical interfaces
necessary to support measurement data collection.

It is a further object of the invention to provide a
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system and method for developing measurement reporting methods.

It is a further object of the invention to provide a system and method for developing training and end-user support materials for a measurement system.

Summary of the Invention

A system and method for defining and implementing measurements to support a customer information technology organization. Steps involve identifying customer performance goals; building a model in response to customer goals including a plurality of primitive metrics; performing a gap analysis of the model to determine which of the primitive metrics are already collected by the organization and the process capabilities to support the data collection; identifying new data collection sources for the primitive metrics which are not already collected by the organization; and implementing the tools and processes for gathering all of the primitive metrics and tools for generating measurement reports from the gathered primitive metrics.

In accordance with a preferred embodiment of the invention, measures of performance of a customer information technology organization are determined by defining the organization goals, identifying the behaviors that the organization exhibits when working toward or meeting the defined goals, identifying and defining the measurements that provide empirical evidence on the achievement and attainment of the desired behaviors, balancing the defined measurement categories, and prioritizing the measurements for implementation based on the balance.

Other features and advantages of this invention will become apparent from the following detailed description of the presently preferred embodiment of the invention, taken in conjunction with the accompanying drawings.

Brief Description of the Drawings

Figure 1 is high level flow diagram illustrating the context of the method of a preferred embodiment of the invention.

Figure 2 is a high-level overview of the measurement

and performance management (MAPM) method of a preferred embodiment of the invention.

5 Figure 3 is a diagram detailing the high-level overview of the MAPM method of Figure 2 from a work product-based view.

Figure 4 is a diagram illustrating the measurement gap analysis embodiment of the invention.

10 Figure 5 is a diagram illustrating a measurement model for an IT organization including the notion of behaviors in accordance with a preferred embodiment of the invention.

Best Mode for Carrying Out the Invention

Referring to Figure 1, the process of the preferred embodiment of the invention for creating a measurement model work product 102 is part of the requirements phase of the measurement and performance management (MAPM) methodology. This process relies on input from a target future business

15

throughout steps 200-206.

Referring to Figure 3, the system and method of the preferred embodiments of the invention are built upon the IBM Work Product-based Methodology Development Approach as defined and implemented by Solution Consulting Integration (SCI) practice through its SCI Enablement Process and new work products which extend the SCI method. These new work products include three work products representing the formulation of the measurement requirements that are to be implemented in an engagement, and are illustrated in Figure 3 as measurement model 102, current customer measurements 242, and measurement gap analysis 103. These new work products also include four work products representing additional implementation and/or technical requirements to support the implementation of measurement model 102, and include interface agreement 268, configuration script 272, contract measurement business policy 276, and scorecard 270.

Practitioner accesses to the documents that are the work products of the preferred embodiment of the method of the invention may be, for example, by way of HTML code that provides users of the method access to work product (WP) dependency diagrams, engagement models, work product description papers and work product technique papers.

Similarly, such documents may be maintained in collaboration space, and available based on access controls, to members of development, marketing and implementation teams throughout an enterprise. The IBM QuickPlace (TM) provides such a collaboration space. The Lotus Domino/Notes (TM) may also be used to control access using access control lists and provide consistency among several instances of data using replication.

An MAPM engagement includes three contextual phases 220, 222, and 224. Proposal phase 220, in the context of developing a measurement solution, represents the development of the initial solution specifications, including costs, that are to be delivered to a customer. Due diligence phase 222 represents the validation of assumptions and expectations that are made in developing a proposal to the customer before an outsourcing agreement is signed. Transition/transformation phase 224 represents the first major group of activities that occur once a legal contract for outsourcing has been established. This is where the transfer of resources and assets occurs and the implementation of specific new processes and procedures is introduced into this new organization.

Proposal phase 220 includes the following work

agreement 268.

As is represented by lines 420 and 427, configuration script 272 provides inputs to scorecard 270 and contract measurement business policy work product 276, respectively.

5 As is represented by line 421, model of technical server architecture work product 262 provides input to deployment plan work product 274.

10 As is represented by line 422, end-user training materials work product 278 provides input to deployment plan work product 274.

As is represented by line 425, contract measurement business policy work product 276 provides input to end-user training materials work product 278.

15 As is represented by lines 426 and 428, model of network workstation technical architecture work product 260 provides inputs to contract measurement business policy work product 276 and deployment plan work product 274, respectively.

As is represented by line 429, scorecard work product
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behaviors. The process implemented by measurement model 102 will be further described hereafter in connection with Figures 5 and 6.

Recommendation and preliminary business case 240
5 defines high level cost benefit estimates on the technical solutions that might be considered for measurement model implementation.

Current customer measurements 242 provides a detailed
list of the measurements that are being collected and
10 reported currently by the customer.

Future process design points 248 provides high level requirements for developing the to-be process design 252.

To-be organization design 250 is the planned organization model.

15 To-be process design is 252 is the planned processes model.

Model of network/workstation technical architecture 260 is a systems view of the hardware and software that supports the end users of the measurement system.

accordance with a preferred embodiment of the invention, a method is provided for systematically analyzing how the IT organization's current measurement system, if one exists, maps to the proposed measurement model and for identifying
5 impacts to the to-be organization design and the to-be process design.

Measurement gap analysis 103 defines the difference between the measurement model 102 and current customer measurements 242, additionally, with reference to to-be
10 organization design 250 and to-be process design 252, considering possible deficiencies in the organization model and organization processes.

Heretofore organizations in industry, while recognizing the need for establishing or improving measurement systems,
15 have done so through a project-level perspective. In accordance with the system and method of the preferred embodiment of the invention, measurement gaps are addressed at the contract or program level. The gaps which are identified include gaps in the measures to be collected,
20 analyzed, reported, and used, together with the critical relationship of measurements to the underlying organization structure and the processes that the organization employs.

Referring to Figure 4, a flow diagram of the measurement gap method of a preferred embodiment of the invention illustrates the inputs and outputs and the steps executed in developing measurement gap analysis work product

5 103.

In step 302, current customer measurements 242 are reviewed.

In step 304, current customer measurements 242 are mapped to measurement model 102.

10 In step 306, measurement gaps are identified.

In step 308, measurements not covered by the measurement model are identified.

In step 310, non-productive measurements are identified.

15 In step 312, the impact to the existing organizational structure is identified.

In step 314, the impact to processes is identified.

In step 316, other requirements for measurement program success are identified.

The canonical method of the preferred embodiment of the invention for developing a system that measures the performance of an IT organization involves identifying measures for an IT organization that are directly tied to goals and behaviors that the IT organization should be exuding, as defined by the IT management team. "Canonical" means fully thought through and consistent. The measurement model work product 102 and associated techniques work from a top-down approach, starting with the goals of the organization, identifying appropriate behaviors and finally associating measures that will empirically demonstrate achievement of the behaviors. In addition, algorithms for prioritization are executed to ensure that the best fitting measures are selected in the final measurement model.

Referring to Figure 5, this canonical process for defining measurements model work product 102 includes in step 232 articulating the envisioned to-be business goals through a series of goals and questions or behaviors. In step 236, in an optional, more specific embodiment, standard business policy driving behaviors that are assumed or expected are defined. In step 234, a measurements catalog

of industry measurements are enumerated and fully defined in a database of existing contract measurements, including behaviors and goals that they satisfy.

In step 326, an intellectual mapping is done between the envisioned to-be business goals and potential measures. A prioritization and balancing process is applied to ensure that the best measures are selected. This step 326 involves a two step prioritization and balancing process including, in step 328, prioritization of measures by number of objectives and behaviors satisfied, and in step 330 identification of measures that have the highest number of occurring related measures in the same or another category.

The method of the preferred embodiment of the invention draws upon several concepts from goals-question-metric (GQM) techniques described in Basili, Victor et al., "The Goal Question Metric Approach," Institute for Advanced Computer Studies, Department of Computer Science, University of Maryland, College Park, Maryland. To this are added notions of behaviors as a bridge between organizational goals and the identification and definition of measures that enable the required behaviors attempting to occur. The inclusion of behaviors in the overall technique implemented by the preferred embodiment of the invention creates a more tightly

integrated measurement model especially when dealing with measurement definition at the IT organization level, where business drivers and other organizational objectives form the basis of measurement requirements. Behaviors are the performance expectations of the individuals affected by the measurement model. These could be new ways of acting or new areas of focus in the respective roles on the account.

Referring to Figure 6, a more detailed description of this canonical process includes, in step 340, defining the IT organization goals; in step 341, defining associated behaviors; in step 342, mapping behaviors against the measurement catalog; in step 343, building a first draft measurement model; in step 344 prioritizing measures by number of behaviors satisfied; in step 345, prioritizing measures on number of related measures; in step 346 building a second draft measurement model; and in step 347 performing gap analysis. Each of these steps will be further described.

In step 340, IT organization goals are identified during the creation of target future business capabilities work product 101. Typically, the goals of the organization are broken out into one or more categories of measures. In accordance with the preferred embodiment of the invention,

Behaviors are typically simple sentence structures and may even be incomplete sentences. They are short statements that represent ideas, actions or activities that demonstrate commitment and refinement of the organization goals.

5 Typically, the organization goals are expressed as high level statements or highly summarized notions. Behaviors are intended to be a level or two below the organization goals and bring about a level of granularity low enough to support identification of measures that might empirically
10 demonstrate achievement of the desired behaviors.

A sample table for capturing the results of this step 341 is included in Table 1: Goals, Behaviors, and Measurements:

TABLE 1: GOALS, BEHAVIORS, AND MEASUREMENTS

Goal 1	Behavior 1	Measurement 1
Goal 2	Behavior 2	Measurement 2

where measurements are those identified in step 342, infra.

In step 342, those measurements from the measurement catalog 234 that best satisfy the identified behaviors are
20 identified. This catalog is a database accessed using associated behaviors as a search parameter.

	FIELD NAME	DESCRIPTION
	MEASUREMENT NAME	NAME OF THE MEASURE
5	MEASUREMENT DEFINITION	ITS DEFINITION
	ELEMENTAL METRICS	WHAT IS THE ELEMENTAL DATA REQUIRED TO CALCULATE THE MEASURE?
10	MEASUREMENT CALCULATION	HOW IS THE MEASURE CALCULATED?
	RELATED MEASUREMENTS	WHAT RELATED MEASURES EXIST FOR THIS MEASUREMENT?
	FREQUENCY OF DATA CAPTURE	HOW OFTEN IS DATA FOR THIS MEASURE COLLECTED?
15	FREQUENCY OF MEASUREMENT REPORTING	HOW OFTEN ARE THE RESULTS OF THIS MEASURE REPORTED?
	REPORTING PROCESS	WHAT I.T. PROCESS TYPICALLY REPORTS THIS DATA?
20	EVENT TRIGGER	WHAT EVENT OR STEP IN THE PROCESS TRIGGERS THE AVAILABILITY OF THIS DATA
	ORGANIZATIONAL OWNER	NAME OF ORGANIZATIONAL OWNER

In step 344, a first prioritization exercise 328 is performed on the measures in the first draft 326 of measurement model 102. For each of the measures identified in step 342, a table is built that describes the relationship with each of the behaviors it may satisfy. In

[illegible]

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TABLE 3: FIRST PRIORITIZATION EXAMPLE: PEOPLE MEASUREMENTS
PART B

		BEHAVIORS/MEASUREMENTS			
	PEOPLE BEHAVIORS	CONTRACTOR ENGAGEMENT DURATION	CONTRACTOR USAGE	UNFILLED POSITIONS	JOB OFFER ACCEPTANCE RATE
5					
10	FORECAST SKILLS NEED ON A ROLLING X MONTH BASIS				
	KNOW/MONITOR THE CURRENT SKILLS	X	X	X	
	MANAGE TO THE SKILLS GAP		X	X	
15	ACTIVELY MANAGE ENVIRONMENTAL ISSUES				
	PLAN AND MANAGE TO SHORT-TERM AND LONG-TERM USAGE OF CONTRACTORS	X	X		
20	MANAGE TO THE REDUCTION OF LONG-TERM CONTRACTOR DEPENDENCIES	X	X		
25	RECRUIT ENTRY LEVEL STAFF TO MEET A PORTION OF FUTURE SKILLS NEED			X	
	HIRE EXPERIENCED PEOPLE TO FILL IMMEDIATE SKILL NEEDS, WHICH ARE LONG- TERM IN NATURE	X		X	
30	PROACTIVELY MANAGE RECRUITMENT UNTIL NEW HIRES ARE ON-BOARD				X
35	PROACTIVELY FOSTER LONG- TERM RELATIONSHIPS WITH LOCAL RECRUITMENT SOURCES				
	CREATE AN ENVIRONMENT ATTRACTIVE TO TARGETED RECRUITS				
40	MEASUREMENT SUBTOTAL	4	4	4	1

The measurement subtotal scores in Table 3 are derived from simple counts of the numbers of X's in each of the columns. Those measures with the highest scores satisfy the most number of behaviors and are more desirable as measurers in the model since they provide more knowledge and insight for the cost of implementation. Of course, the table could be modified to reflect weighting factors on both cost and effectiveness, but such is not deemed essential for this embodiment of the invention.

In step 345, the second prioritization process 330 is performed on the measurements in the first draft 326 of measurement model 102. For each of the measures identified in step 342, a table is built that describes the related measure. In many cases a single measure may actually be related to more than one measure. This is important in the identification and selection of measures, since it is most desirable to keep the final number of measures to a minimum. This prioritization process 330 is done for each of the categories of the measurement model. Table 4, Second Prioritization Example: People Measurements, illustrates how to capture the prioritization in this step 345.

**TABLE 4: SECOND PRIORITIZATION EXAMPLE: PEOPLE MEASUREMENTS
PART A**

		PEOPLE MEASUREMENTS			
5	PEOPLE MEASUREMENTS	JOB SATIS- FACTION	TURNOVER RATE	REASONS FOR EXIT	CERTI- FICATION PROGRAM EFFECTIVE- NESS
10	JOB SATISFACTION	0	X	X	X
	TURNOVER RATE		0	X	X
	REASONS FOR EXIT	X		0	
15	CERTIFICATION PROGRAM EFFECTIVENESS	X	X		0
	CONTRACTOR ENGAGEMENT DURATION	X			
	CONTRACTOR USAGE	X			
20	UNFILLED POSITIONS	X			
	JOB OFFER ACCEPTANCE RATE				X
	MEASUREMENT SUBTOTAL	5	2	2	3

**TABLE 4: SECOND PRIORITIZATION EXAMPLE: PEOPLE MEASUREMENTS
PART B**

		PEOPLE MEASUREMENTS			
	PEOPLE MEASUREMENTS	CONTRACTOR ENGAGEMENT DURATION	CONTRACTOR USAGE	UNFILLED POSITIONS	JOB OFFER ACCEPTANCE RATE
5	JOB SATISFACTION		X		
10	TURNOVER RATE	X	X		
	REASONS FOR EXIT				
	CERTIFICATION PROGRAM EFFECTIVENESS				
15	CONTRACTOR ENGAGEMENT DURATION	0		X	
	CONTRACTOR USAGE		0	X	X
	UNFILLED POSITIONS			0	X
20	JOB OFFER ACCEPTANCE RATE	X	X		0
	MEASUREMENT SUBTOTAL	2	3	2	2

The measurement subtotal is derived from the sum of X's in each of the columns. Those measures that have the highest scores also have the highest number of related measures, making them desirable as measurement for the base model. When prioritized against the results of the behaviors to measurement matrix (Table 3), an initial set of measurements can be identified. The cells with a "0" entry indicate the same measure to same measure condition, which

should not be considered in the matrix, because it is not meaningful to relate a measure to itself.

In step 346, the results of the prioritization processes 328 and 330 are used to build the second draft 332 of measurement model 102. The tables built in steps 344 and 345 are used to select those measures that should be included in the final measurement model. A simple approach is to calculate the mean values of measurement subtotals from each of Tables 3 and 4 and select those measures that have scores greater than or equal to that mean.

As an example, in step 344, the mean score is

$$[(2+2+2+0+4+4+4+1)/8] = 2.375$$

As a result, the following measures would be selected: contractor engagement duration, contractor usage, and unfilled positions. Some measures may need to be included in measurement model 102 in exception of this prioritization process either because of specific customer need or because it may be the only measure that satisfies a particular behavior and/or goal.

The selected measures are then captured in the format
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described in step 343, Table 2.

In step 347, once the final set of measures has been documented, a gap analysis 103, as previously described in connection with Figure 4, needs to be done to ensure that linkages are in place between the measurements, processes and organization. In addition, any time a change that results in the addition or deletion of a measurement in the model occurs, the gap analysis step is performed.

Advantages over the Prior Art

It is an advantage of the invention that there is provided a system and method for systematically defining and implementing a measurement program.

It is a further advantage of the invention that there is provided a system and method for implementing a measurement program that is supported by an appropriate organizational structure and that is fully integrated with the organization's processes.

It is a further advantage of the invention that there

It is a further advantage of the invention that there is provided a system and method for developing measurement reporting methods.

5 It is a further advantage of the invention that there is provided a system and method for developing training and end-user support materials for a measurement system.

Alternative Embodiments

10 It will be appreciated that, although specific embodiments of the invention have been described herein for purposes of illustration, various modifications may be made without departing from the spirit and scope of the invention. In particular, it is within the scope of the invention to provide a computer program product or program element, or a program storage or memory device such as a
15 solid or fluid transmission medium, magnetic or optical wire, tape or disc, or the like, for storing signals readable by a machine, for controlling the operation of a computer according to the method of the invention and/or to structure its components in accordance with the system of
20 the invention.

CLAIMS

We claim:

1 1. A method for defining the measures of performance of a
2 customer information technology organization, comprising the
3 steps of:

4 identifying customer performance goals;

5 building a model in response to the customer goals
6 including a plurality of primitive metrics;

7 performing gap analysis of the model to determine which
8 of the primitive metrics are already collected by said
9 organization and the process capabilities for data
10 collection;

11 identifying new data collection sources for those
12 primitive metrics which are not already collected by
13 said organization;

14 implementing tools and processes for gathering said

5 achieve through measurements; and

6 translating said customer goals into a measurement
7 model work product defining account specific behaviors
8 and measures that empirically demonstrate said
9 behaviors.

1 5. The method of claim 4, further comprising the step of:

2 defining a gap analysis work product specifying
3 differences between said measurement model work product
4 and current customer measurements to identify possible
5 deficiencies in organization measurement processes.

1 6. A system for creating and using a measurement model
2 work product, comprising:

3 a target future business capabilities work product for
4 defining customer goals necessary to achieve through
5 measurements; and

6 a measurement model work product for translating said
7 customer goals into account specific behaviors and

8 measures that empirically demonstrate said behaviors.

1 7. The system of claim 6, further comprising:

2 a gap analysis work product for specifying differences
3 between said measurement model work product and current
4 customer measurements to identify possible deficiencies
5 in organization measurement processes.

1 8. A method for defining the measures of performance of a
2 customer information technology organization, comprising the
3 steps of:

4 collecting into a competency-defined measurement
5 categories and measurements file definitions of
6 selected categories of behavioral measurements;

7 selecting from said file contract measurements;

8 implementing said contract measurements; and

9 using and maintaining said measurements.

1 9. The method of claim 8, said categories including human
2 resources, quality, customer, cost and schedule, process,
3 and productivity and output categories of behavioral
4 measurements.

1 10. System for formulating measurement requirements that
2 are to be implemented in an engagement, comprising:

3 a current customer measurements work product for
4 detailing current measurements being collected and
5 reported by a customer;

6 a measurement model work product for translating
7 customer goals into account specific behaviors and
8 measures that empirically demonstrate said behaviors;
9 and

10 a measurement gap analysis work product for defining
11 differences between said current measurements and said
12 account specific behaviors and measures.

8 during a transformation phase, transferring to said
9 customer resources and assets for implementing said
10 measurement solution as validated.

1 13. The method of claim 12, said developing step comprising
2 the further step of:

3 building said measurement solution responsive to inputs
4 from a measurement catalog work product and a target
5 future business capabilities work product.

1 14. The method of claim 13, said validating step comprising
2 the further step of:

3 executing a measurement gap analysis work product
4 responsive to inputs from a current customer
5 measurements work product, a future process design
6 points work product, a to-be organization design work
7 product and a to-be process design work product.

8 means for selecting potential measurements for said
 9 business goals and behaviors from said second database;
 10 prioritizing and balancing means for determining from
 11 said potential measurements those to be included in
 12 said measurement model work product.

1 20. A method for defining a measurements model work
 2 product, comprising the steps of:

3 defining the goals of a customer information technology
 4 organization;

5 defining behaviors associated with said goals;

6 mapping said behaviors against a measurement catalog to
 7 identify first measures related to said behaviors;

8 building a first draft measurement model from said
 9 first measures;

10 prioritizing said first measures with respect to number
 11 of behaviors satisfied;

11 and measures that empirically demonstrate said
12 behaviors.

24. A program storage device readable by a machine,
tangibly embodying a program of instructions executable by a
machine to perform method steps for defining the measures of
performance of a customer information technology
organization, said method steps comprising:

6 collecting into a competency-defined measurement
7 categories and measurements file definitions of
8 selected categories of behavioral measurements;

9 selecting from said file contract measurements;

10 implementing said contract measurements; and

11 using and maintaining said measurements.

1 25. A program storage device readable by a machine,
2 tangibly embodying a program of instructions executable by a
3 machine to perform method steps for providing a measurement
4 and performance management method, said method steps

5 comprising:

6 during a proposal contextual phase, developing a
7 measurement solution to be delivered to a customer;

8 during a due diligence phase, validating assumptions
9 and behavioral expectations in said measurement
10 solution; and

11 during a transformation phase, transferring to said
12 customer resources and assets for implementing said
13 measurement solution as validated.

1 26. A program storage device readable by a machine,
2 tangibly embodying a program of instructions executable by a
3 machine to perform method steps for executing a gap analysis
4 responsive to a measurement model and current customer
5 measurements, said method steps comprising:

6 mapping said current measurement model to said current
7 customer measurements and identifying measurement gaps;

8 identifying measurements not covered by said
9 measurement model;

10 identifying nonproductive measurements;

11 identifying the impact to an organizational structure
12 and processes of said customer of said measurement
13 gaps; and

14 identifying any other requirements for measurement
15 program success.

1 27. A program storage device readable by a machine,
2 tangibly embodying a program of instructions executable by a
3 machine to perform method steps for defining a measurements
4 model work product, said method steps comprising:

5 articulating envisioned business goals and behaviors;

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6       enumerating and defining behaviors and goals satisfied
7       by said behaviors in a database of existing contract
8       measurements;

```

9 selecting potential measurements for said business
10 goals and behaviors from said database;

11 prioritizing and balancing said potential measurements

12 to determine said measurement model work product.

1 28. A program storage device readable by a machine,
2 tangibly embodying a program of instructions executable by a
3 machine to perform method steps for defining a measurements
4 model work product, said method steps comprising:

5 defining the goals of a customer information technology
6 organization;

7 defining behaviors associated with said goals;

8 mapping said behaviors against a measurement catalog to
9 identify first measures related to said behaviors;

10 building a first draft measurement model from said
11 first measures;

12 prioritizing said first measures with respect to number
13 of behaviors satisfied;

14 prioritizing said first measures with respect to number
15 of related measures;

16 responsive to said prioritizing steps, building a
17 second draft measurement model.

[illegible]

SYSTEM AND METHOD FOR MEASURING AND MANAGING PERFORMANCE IN
AN INFORMATION TECHNOLOGY ORGNIZATION

Abstract of the Disclosure

5 An IT measurement system is aligned with the IT
organization's business goals by examining the IT
organization's current state-of-affairs with respect to
measurement and analyzing how it maps to a proposed
measurement model. To ensure the viability of the proposed
10 measurement model, the IT organization and measurement
processes it employs are structured to naturally support the
collection, analysis, reporting, and use of the measurements
in the proposed model. The measurement model and associated
techniques work from a top-down approach, starting with the
15 goals of the organization, identifying appropriate behaviors
and finally associating measures that will empirically
demonstrate achievement of the behaviors. In addition,
algorithms for prioritization are executed to ensure that
the best fitting measures are selected in the final
20 measurement model.



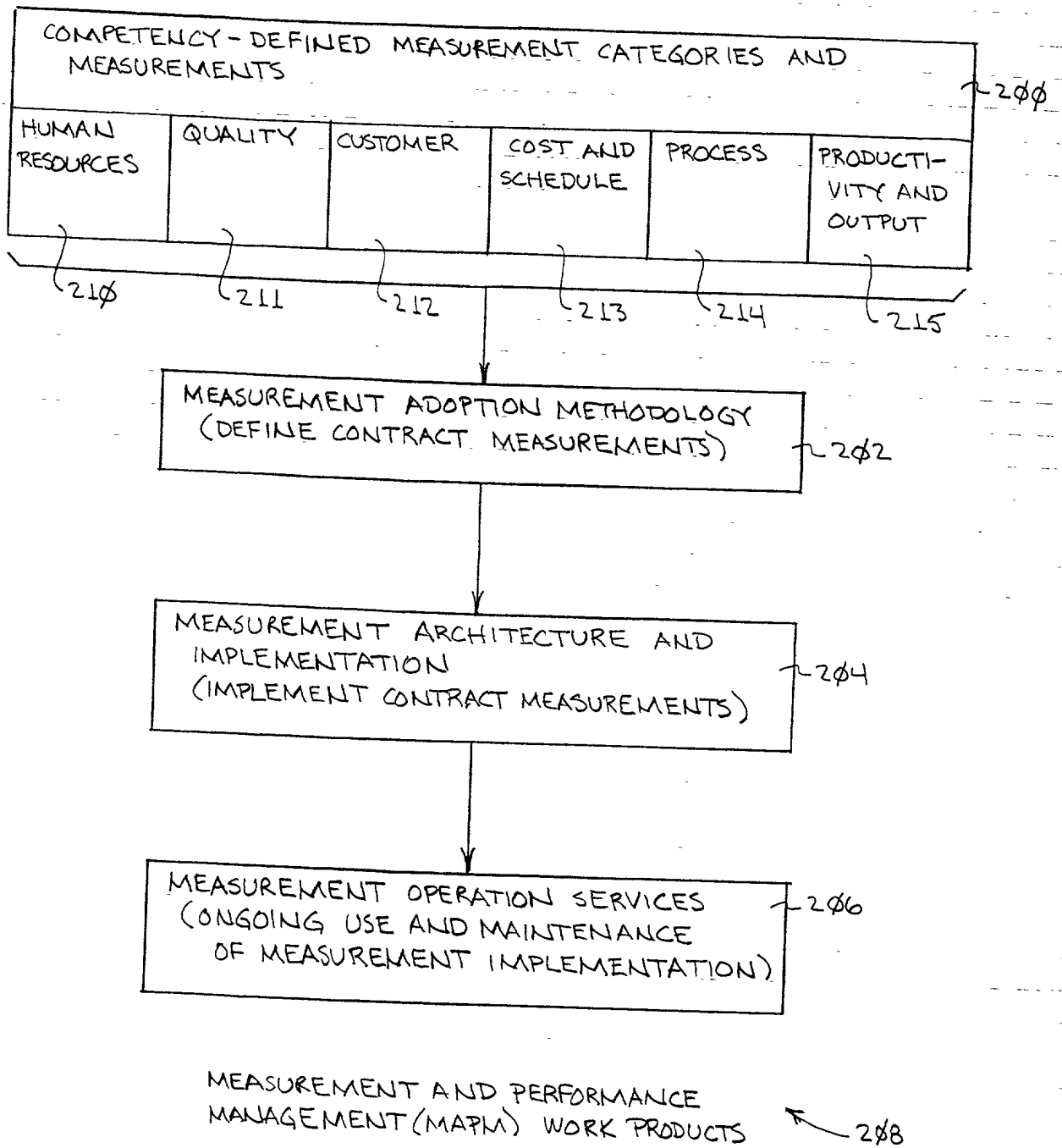
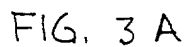


FIG. 2

[illegible]

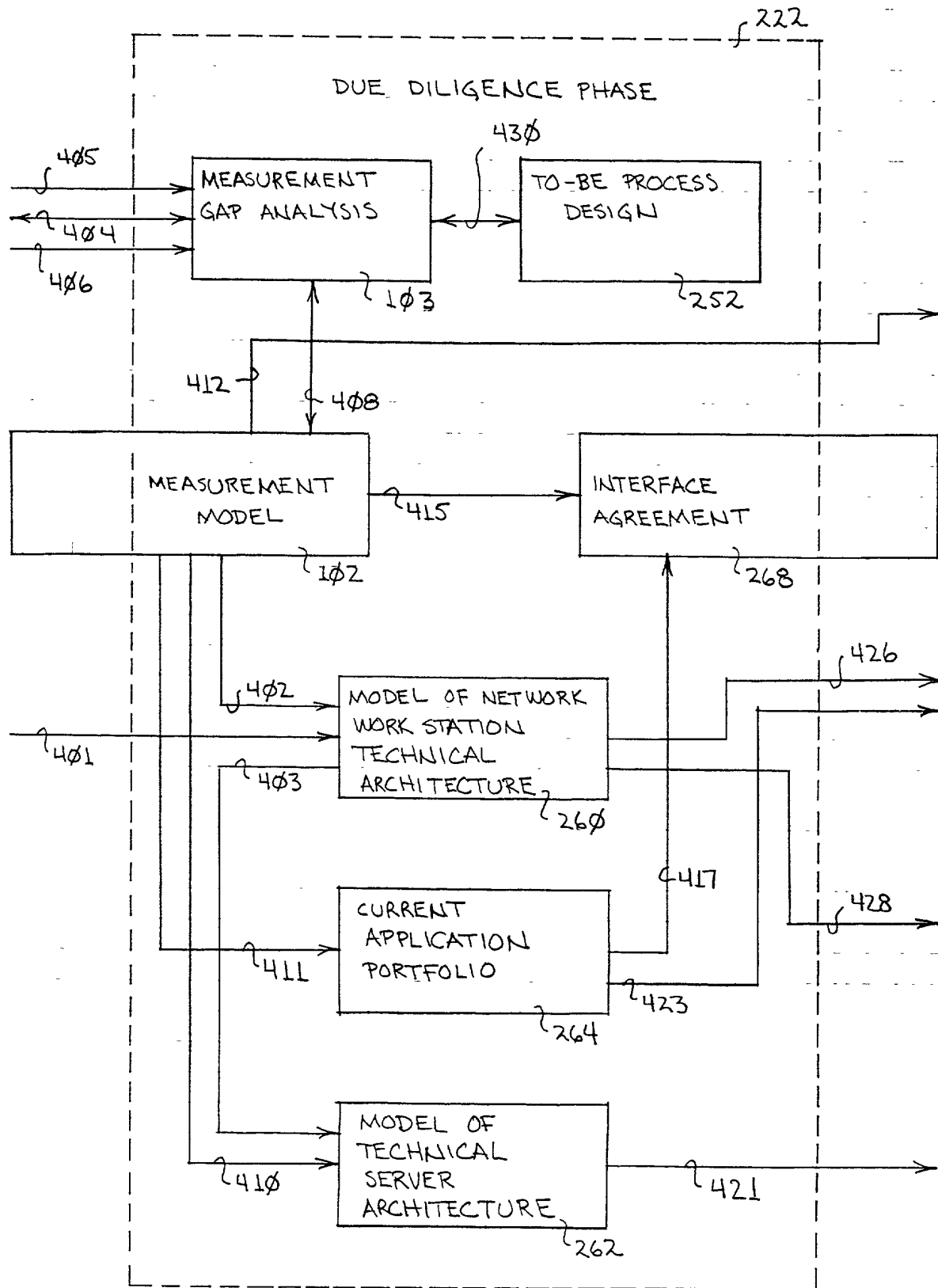


FIG. 3B

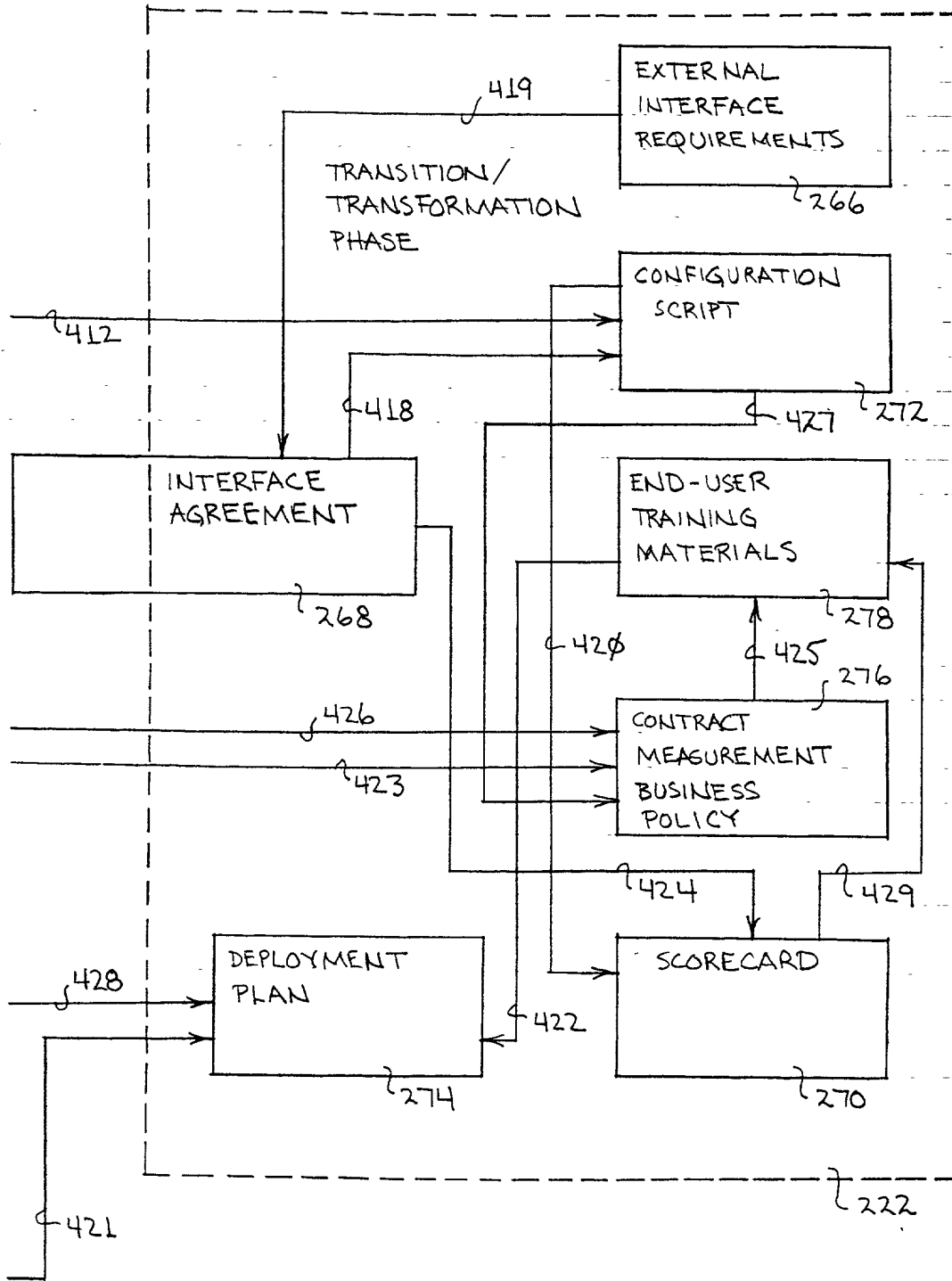


FIG. 3C

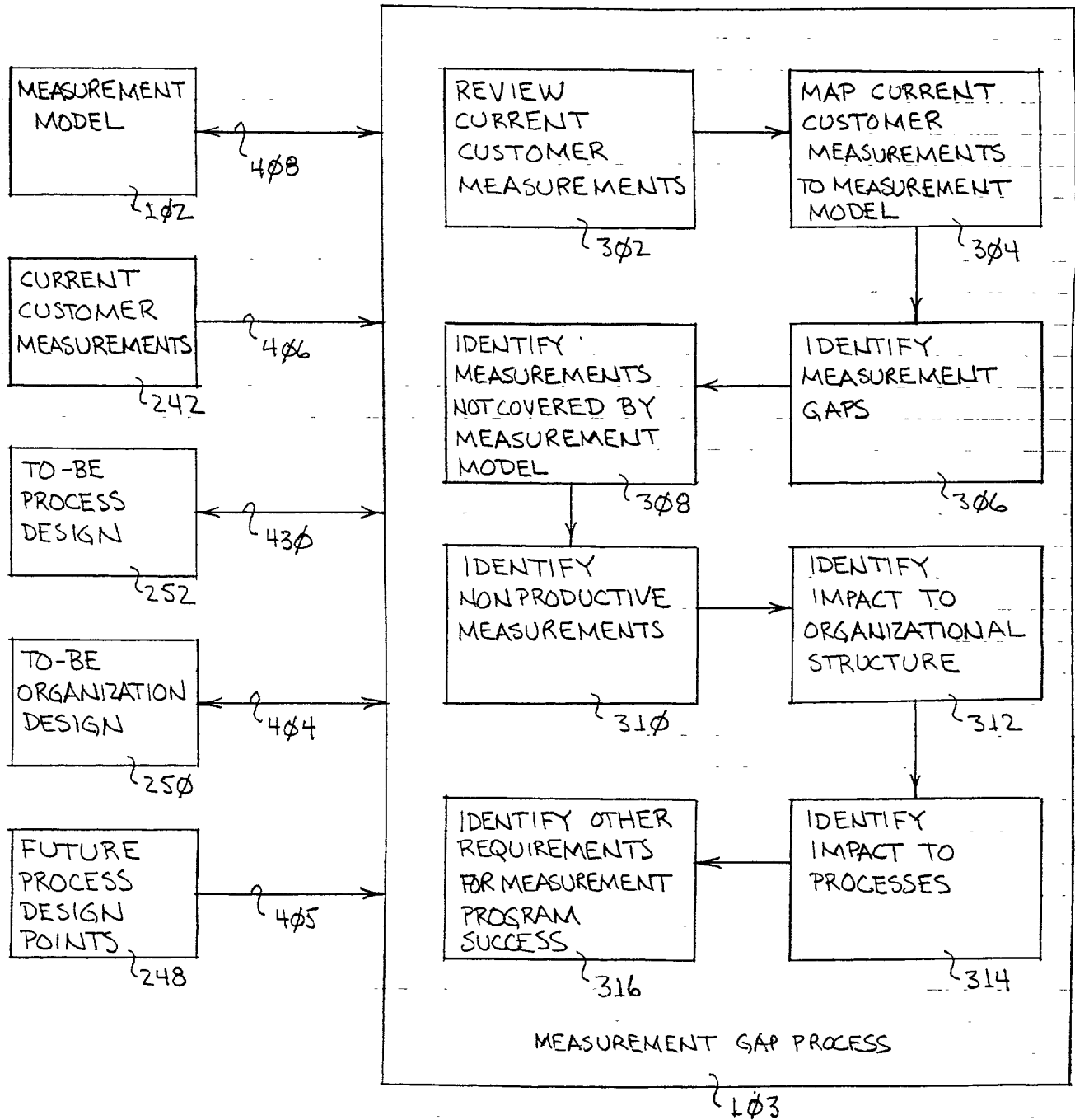


FIG. 4

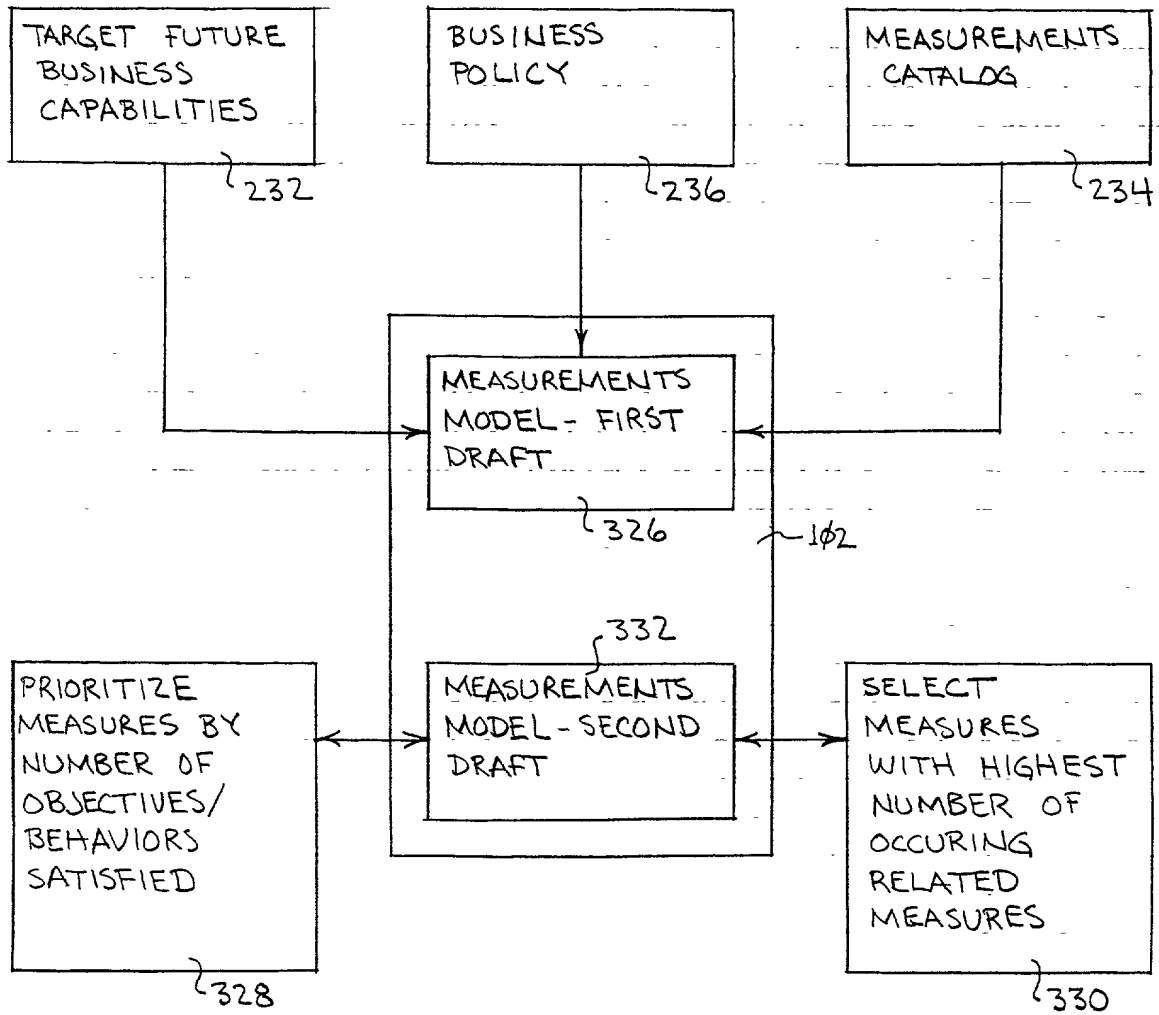


FIG. 5

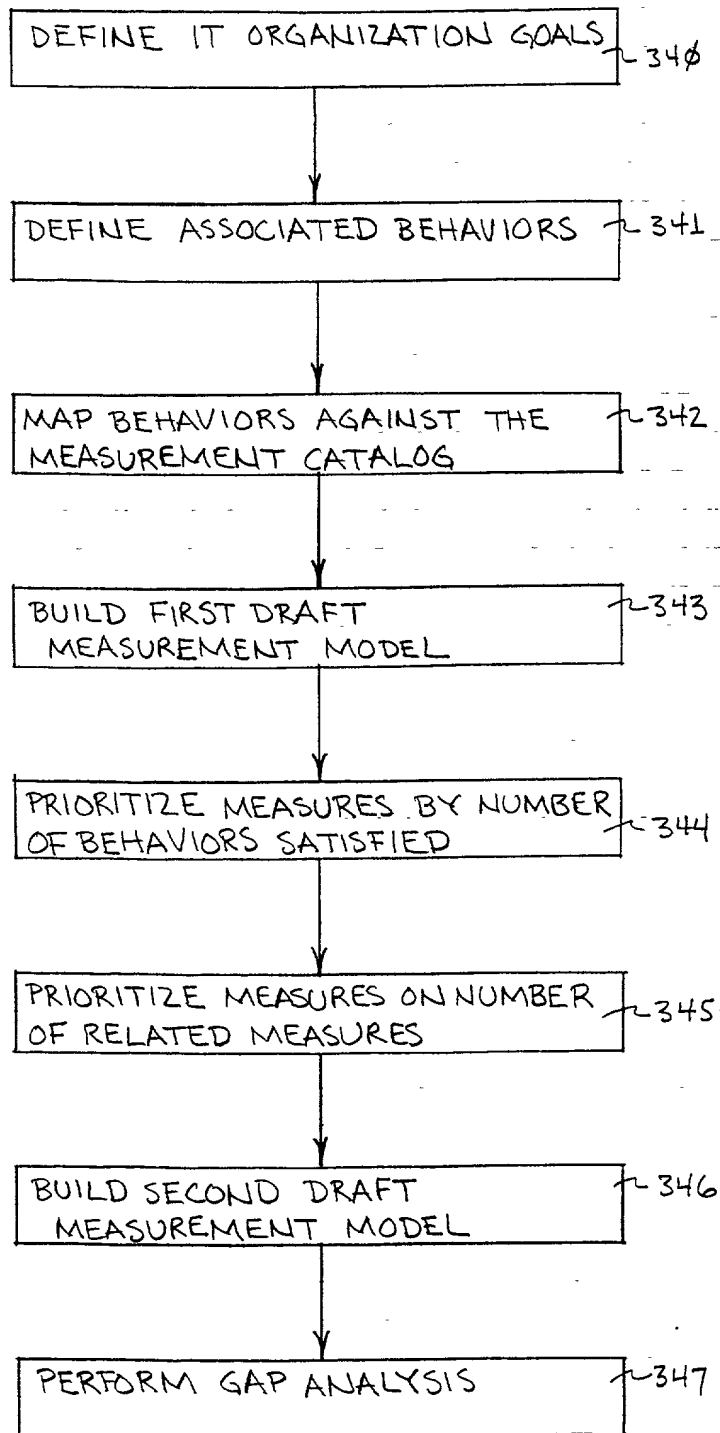


FIG. 6

As a below named inventor, I hereby declare that:

the specification of which (check one)

X is attached hereto.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d) or Section 365(b) of any foreign application(s) for patent or inventor's certificate or Section 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below any foreign application for patent or inventors certificate, or PCAT International application having a filing date before that of the application on which priority is claimed::

Prior Foreign Application(s):

Number	Country	Date/Month/Year	Priority Claimed
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I hereby claim the benefit under 35 U.S.C. Section 119(e) of any United States provisional application(s) listed below.

Application Number	Filing Date
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I hereby claim the benefit under Title 35, United States Code, section 120 of any United States application(s), or Section 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. Section 112, I acknowledge the duty to disclose information material to patentability of this application as defined in 37 CFR Section 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application:

Prior U.S. Applications:

Serial No.	Filing Date	Status (patented, pending, abandoned)
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